tion of urine had now taken place, after a complete cessation of forty-eight hours. Mr. — had, in fact recovered.

REMARKS. The foregoing particulars I leave with you. I offer you them in earnestness, and yet with all deference to the individual experience and conclusions of gentlemen present. Pray do not prejudice this question of the treatment of cholera; it is one of great importance, involving as it does the health and life of very many now living, and of countless thousands yet unborn. Be assured that cholera statistics are, up to this time, in many respects valueless. You will have seen elaborate tables, long drawn out, prepared to show the comparative failure of the eliminative treatment of this fearful malady; but I would ask you to remember that the castor oil treatment is *not* the legitimate "eliminative" treatment. Such does not constitute the treatment by purgatives, as the foregoing case detailed to you so completely and successfully realises. The statistics of cholera remain to this time to be demonstrated.

INTESTINAL OBSTRUCTION, WITH STERCORACEOUS VOMITING AND HICCUGH, DURING SEVEN DAYS.

By Jos. C. S. JENNINGS, Esq., Malmesbury.

[Read before the Bath and Bristol Branch, Sept. 24th, 1857.]

Miss A. K., aged 18, of sallow complexion, but with the catamenia regular, came under my care on Tuesday, March 3rd. She had consulted me a few days previously for slight dyspeptic symptoms. I now found her in great agony, with incessant bilious vomiting. I ordered two pills of compound extract of colocynth and blue pill to be taken immediately, followed up by effervescing draughts.

March 5th. On this morning the pills were repeated, with the addition of creasote; but this failing, the following was ordered:—

R. Pulveris opii gr. j; hydrargyri chloridi gr. j. M. Fiat pulvis 3tiis horis sumendus. Mitte iv.

An enema, containing compound extract of colocynth, was also administered.

March 6th. The same treatment was pursued, but without allaying the vomiting. There were now (10 A.M.) great tenderness of the right hypochondrium, acute lancinating pains, and hard rapid pulse—indeed, all the usual symptoms of enteritis. I therefore had recourse to bleeding, and directed eight leeches to be applied to the painful region.

March 7th. The enemata, with warm fomentations, and the powders, were continued at intervals during the day; but, as no relief was obtained, and the vomiting had become fecal, I passed up the rectum an œsophagus-tube, to which a pair of bellows was attached by vulcanised India-rubber tubing, and proceeded to inflate the bowels with air until the distension could be no longer borne. This had the happy effect of instantly exciting the peristaltic action of the intestine; and a copious scybalous stool was the result, with immediate abatement of all the alarming symptoms. Some effervescing medicine was afterwards prescribed. In two days the patient was able to sit up, and I found her engaged with her needle; and, though much reduced in strength, apparently in her usual health.

March 10th. I was hastily called on to see her, in consequence of a return of vomiting and violent pains in the abdomen, recurring at intervals of a quarter of an hour. I gave immediately two grains of calomel and a grain of opium; and an antispasmodic mixture, containing compound spirit of sulphuric ether, to be taken every two hours, alternately with a pill containing half a grain of hydrochlorate of morphia.

March 20th. An enema of compound extract of colocynth was administered; and, as the thirst was great, a small quantity of simple effervescing mixture was allowed occasionally. Eight more morphia pills, one to be taken every four hours, alternately with the same containing one drop of croton oil in each, were ordered. The pulse was now small and rapid, but there were no inflammatory symptoms. The vomiting had, however, become stercoraceous, and was ejected with great force and suddenness through the mouth and nostrils.

March 21st. Pills containing one grain of opium were now given after every vomit, and the enemata were continued occasionally. Inflation now failed to relieve the bowels. O'Beirn's tube having, therefore, been passed about a foot, a copious injection of cold spring water was thrown up, to the amount of two quarts; but this also failed to excite any action, although

had recourse to three times at intervals. Two-grain doses of opium were now administered in pills, to relieve the very distressing vomiting.

March 22nd, 8 A.M. The vomiting continued. The pulse was very small and rapid; the countenance anxious. Two enemata of cold water were administered without success.

10 P.M. A fermenting mass of yeast, flour and water, was now injected through O'Beirn's tube passed a considerable distance up the bowel, and the opiates were continued during the night.

March 23rd, 12 noon. Great distension had been produced by the yeast which had been retained, but there had been no action of the bowels beyond expulsion of flatus. The pulse was now scarcely perceptible; the throat was dry, with sense of constriction; deglutition very difficult; and the tongue preternaturally red with raised papillæ at its edges. The patient had taken nothing except medicines for two days, and appeared almost unconscious except when spoken to. The eyes were much sunken, and surrounded by a dark zone. Her condition more resembled that of catalepsy. There was also scanty menstruation. I now gave a turpentine enema, and finding after an hour that its peculiar smell could be detected in the breath, I administered the following day, March 24th, at 10 A.M., a similar enema, followed up by inflation of the bowels, and afterwards gave the following pills during a lull in the vomiting.

R. Olei crotonis gtt. iv; extracti colocynthidis co. gr. viij; pilulæ hydrargyri q. s. M. Fiat pilulæ iv, quarum ij statim sumantur.

Three hours afterwards, a copious stool was passed.

March 25th, 2 A.M. There was a dejection; semi-fluid, containing scybala, compressed, riband-like, and fawn-coloured.

5 A.M. Similar stool.

10 A.M. I prescribed aperient effervescing draught to be taken every three hours.

March 20th. The patient was convalescent, and went on well till May 21st, when vomiting returned. A compound colocynth enema was at once administered, and two drops of croton oil with compound extract of colocynth and blue pill were given, followed by a turpentine enema, which produced a copious stool, and all the symptoms subsided.

REMARKS. The first attack appeared to be produced by a long walk after an early breakfast, without the usual full midday meal, and a hearty supper of cold boiled beef and a subsequent walk of two miles. I was induced to diagnose intussusception in the first and second attacks, and the peculiar compressed riband-like character of the fæces evacuated seem to favour this supposition. I find a very similar case recorded by Dr. Brittan in the BRITISH MEDICAL JOURNAL for January 17th, and another by Dr. Jackson on March 14th, in which the advantage of treating these cases by opium until the tendency to vomiting has subsided, is clearly demonstrated. The means ultimately adopted for the evacuation of the bowel may, I think, be frequently used with advantage, and in some cases where a cataleptic state of the system appears to be indicated.

MALFORMATION OF THE HEAD IN THE FŒTUS.

By HENRY G. TREND, Esq., Eye, near Peterborough, late Resident Accoucheur to St. Thomas's Hospital.

DURING the past twelve months, three almost similar cases of malformation of the head in the fœtus have occurred in my practice; and from their comparative rarity, and the difficulty that was thrown in the way of detecting the presentation, I am induced to lay them before my fellow-associates.

CASE I. On September 29th, 1856, about 8 A.M., I was summoned to attend Mrs. J. L., aged 19, a fine healthy-looking young woman, in her first confinement. Her residence not being more than a dozen yards from my own door, I was on the spot immediately, and found her down stairs lying on the floor in a bucket full of liquor amnii and bloody fluid; the women present being all very much excited. I had her carried up to bed, and on inquiry found that she had passed a very good night, and had been first taken poorly when her husband went out to work at six o'clock. On examination, the os uteri was found almost fully dilated, and the finger came against a soft placental-like mass. My first thought was that it was a case of placenta prævia; on further examination, however, I detected higher up posteriorly an uneven serrated edge. I was turning over in my mind what the presentation could possibly be, when a violent pain expelled a male child, and unravelled the mystery.

The child presented a very curious appearance. The whole of the occipital, and both parietal bones, were wanting; there seemed to be no neck; and the face looked as if its lower half were stuck between the clavicles; the posterior portions of the cerebrum and cerebellum, and some of the upper portion of the spine too, seemed wanting. I was very anxious to secure the child, but the friends resisted all my endeavours to examine it thoroughly. The limbs were preternaturally long; the child seemed well nourished, was at the full time, and had not been dead many hours. The placenta came away naturally, and the woman did very well for some weeks; she then caught a severe cold, and died in three months of phthisis.

CASE II. About 10 A.M., on June 6th, 1857, I was requested to see Mrs. M., aged 37, who was every day expecting her fifth child. She stated that she had not felt any movement for two days, and complained of a dull aching pain over the whole abdomen; the bowels were very loose, and she was suffering from severe sickness. The abdomen was not larger than natural under the circumstances, and the pain did not seem increased by pressure. The most careful examination did not detect the sounds of the fetal heart, and there was no placental bruit. I told her I thought the child was dead, and ordered the following mixture.

R. Confectionis aromaticæ ʒss; liquoris opii sedativi ℥xxiv; ætheris chlorici ʒiss; syrupi simplicis ʒiij; aquæ cinnamonomi ad ʒvj. *M.* Fiat mistura, cujus capiat cochlearia ij magna 4tis horis.

She was somewhat better in the evening; but the bowels being still very loose, and the pain rather severe at times, I ordered her to continue the medicine, and take the following pills at bedtime.

R. Hydrargyri chloridi gr. iij; pilulæ saponis comp. gr. v. *M.* Fiat pilulæ ij.

She passed a very comfortable night. About ten o'clock the next day labour commenced, and the child, a female, was born just as I entered the house. It presented almost the same appearances as the one in the last case; but it had been evidently dead longer, and was not so well nourished. The placenta caused considerably difficulty, so that after waiting an hour, I introduced my hand and took it away; the chord was very tender, and the placenta disorganised.

About three days afterwards she had an attack of peritonitis, which however speedily yielded to the usual treatment by leeches and calomel.

CASE III. On Friday, October 9th, 1857, about 10 A.M., I was called on to attend Mrs. H., a young woman, aged 23, in her first confinement. On inquiry, I found that she had been poorly most of the night, and the membranes had ruptured about an hour previous to my coming in, discharging several quarts of liquor amnii. An examination showed the os uteri dilated to about the size of a shilling, high up, thick and cushiony, with pains about every half hour; but no presenting part could be felt. I left, giving directions to be sent for when the pains were more severe and frequent. I was again sent for about eight o'clock in the evening, and on examination found what at first struck me as being a shoulder; it, however, seemed too sharp and pointed for that; in fact, I could very satisfactorily make out what the presentation was not. After a very careful examination, I discovered one ear, then the other, and having passed up my finger as high as possible posteriorly, it came against the mouth. This at once satisfied me that it was a natural presentation, with some malformation, the only thing confusing about it being the great prominence of the eyes. In about a quarter of an hour, a female child was born, exhibiting the same peculiarities as in both the preceding cases. The child in other respects was a fine one, well nourished, and had evidently not been dead long. The after-birth soon came away; and the patient is now going on well. I might mention that she had an abundant supply of milk, and that the breasts were very painful, so I thought it a favourable case to try the belladonna as recommended by my esteemed friend Dr. Gooldeen. Accordingly, on the third day, I painted a little of the extract with a feather around the nipple, as far as the areola extended, and on my visit the following morning, the result was almost miraculous. There was no milk; the breasts had resumed their ordinary size; and there was not a vestige of tenderness. She told me that the application had caused a slight smarting, but that in other respects she had felt no inconvenience.

REMARKS. I cannot pretend to assign any cause for the curious *lusus naturæ* exhibited in the foregoing cases. My friend Mr. Beecroft, a retired medical man, residing in the village, saw the first and last cases I have related, and can testify to the

difficulty caused in ascertaining correctly the presentation. I very much regret that in neither case was I able to secure the fetus for an accurate and satisfactory examination. It seems remarkable that in all three cases, the malformation should have been of the same character, and that the children should in all other respects have been well formed, and have lived up to a very short time of their birth.

EXPERIMENTS UPON DOGS WHEN UNDER THE INFLUENCE OF STRYCHNIA, CONDUCTED BY THE LATE DR. MARSHALL HALL.

By JOHN SLOANE, M.D., House-Surgeon to the Leicester Infirmary, etc.

It is well known that, some years ago, Dr. Marshall Hall proposed tracheotomy as a remedy in some forms of epilepsy and other allied convulsive affections. To quote his own words, "There are two cases of epilepsy in which the propriety and efficacy of tracheotomy admit of no doubt. The first of these is the *epilepsia laryngea*, of inorganic origin, in its early stage, threatening mind or life, not yet involving organic change; that is *spasmodic laryngismus* and its effects. The same remark applies to other convulsive diseases, puerperal convulsion inclusive. The second is the *epilepsia laryngea*, proceeding to coma and *paralytic laryngismus* or stertor, augmenting the coma, and endangering life. The same remark applies to coma left by other convulsive diseases, and to all kinds of *simple apoplexy*; that is, apoplexy without lesion or rupture of vessels, deep intoxication, narcotic poisoning, etc."

In May 1854, when visiting his relatives at Nottingham, Dr. Hall performed the following experiments at the General Hospital, in the presence of most of the medical men of the town, with the view of ascertaining the effects of tracheotomy upon dogs in which convulsions had been induced by strychnia. He stated that strychnia caused convulsions more closely resembling epilepsy than any other agent with which he was acquainted; and he was of opinion that, by observing the effects of tracheotomy in the spasmodic paroxysms produced by strychnia, much might be learned regarding the influence of his proposed remedy over epileptic convulsions. Dr. Hall directed, and seemed very much interested in, these experiments; and I can never forget the singular zeal and devotion of this distinguished man, whose recent death our profession and suffering humanity have to deplore; who, while afflicted with an incurable disease, which forced him to relinquish a most lucrative practice, at a time, too, when he had achieved a world-wide reputation,—laboured perseveringly and most successfully to extend the boundaries of science. I had the honour of being requested to note the results of the experiments, of which I shall proceed to give an abbreviated description.

A tenth of a grain of acetate of strychnia was given to a terrier bitch on a piece of meat. As no visible effects were produced in a quarter of an hour, the dose was repeated; but the strychnia this time was given in a pill made with mucilage. After the lapse of fifteen minutes, spasmodic action began slightly; the tail was flexed, and drawn between the hind legs; and the animal walked about uneasily, with the nails protruded, so as to cause a rattling noise as she wandered over a boarded floor. In ten minutes she began to pant, with open mouth, and assumed a position as if wearied with running. A minute afterwards, a tetanic spasm occurred, which shortly passed off; and the dog was placed on a table, over which she walked unsteadily for two minutes, when, by a sudden spasmodic action of the muscles generally, she was thrown from the table. The tongue, in the fit, was livid. After it was over, she generally kept her mouth open, and panted; when the mouth was closed, the panting ceased; she lay upon the table on her side, with the legs extended. The respirations were 280 in the minute; the pupils extremely dilated; but, upon examination four minutes afterwards, they had become normal. Mr. Booth Eddison performed tracheotomy, after a method proposed by Dr. Marshall Hall. The skin over the windpipe was drawn into a fold, and divided with a pair of scissors, of which both the inner and outer margins of the blades were sharpened; but there was a projecting shoulder upon the outer edge of the blades, at a short distance from the points. The scissors were next passed between the rings of the trachea, and the handles drawn asunder. An instrument made of silver wire, of due strength, having been so bent alternately eight times, and united at its extreme points, as to form a tube-like cage, was